## 997 Functional Acknowledgment

Functional Group ID=FA

#### **Introduction:**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

#### Notes:

Use this implementation convention to acknowledge receipt, and acceptance or rejection of a functional group and the transaction set(s) contained within it based upon EDI translation software syntax edits.

<b>Page No.</b> 3	Pos. <u>No.</u> 0100	Seg. <u>ID</u> ST	<u>Name</u> Transaction Set Header	Req. <u>Des.</u> M	Max.Use	Loop <u>Repeat</u>	Notes and Comments n1
4	0200	AK1	Functional Group Response Header	M	1		n2
			LOOP ID - AK2		·	999999	
5	0300	AK2	Transaction Set Response Header	O	1		n3
			LOOP ID - AK3		·	999999	
6	0400	AK3	Data Segment Note	O	1		c1
7	0500	AK4	Data Element Note	O	99		
9	0600	AK5	Transaction Set Response Trailer	M	1		
10	0700	AK9	Functional Group Response Trailer	M	1		
12	0800	SE	Transaction Set Trailer	M	1		

#### **Transaction Set Notes**

- 1. These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
  - The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code. There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.
- **2.** AK1 is used to respond to the functional group header and to start the acknowledgment for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

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**3.** AK2 is used to start the acknowledgment of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

#### **Transaction Set Comments**

1. The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

Segment: ST Transaction Set Header

**Position:** 0100

Loop:

Level:

**Usage:** Mandatory

Max Use: 1

**Purpose:** To indicate the start of a transaction set and to assign a control number

**Syntax Notes:** 

**Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the

interchange partners to select the appropriate transaction set definition (e.g.,

810 selects the Invoice Transaction Set).

2 The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation

convention to match the transaction set definition.

#### **Comments:**

	Ref.	Data					
	Des.	<b>Element</b>	<u>Name</u>	<u>Attributes</u>			
$\mathbf{M}$	ST01	143	<b>Transaction Set Identifier Code</b>	M ID 3/3			
			Code uniquely identifying a Transaction Set				
			997 Functional Acknowledgment				
M	ST02	329	<b>Transaction Set Control Number</b>	M AN 4/9			
			Identifying control number that must be unique within the trifunctional group assigned by the originator for a transaction				
			Use to transmit a unique number assigned by the originator of the transaction set. The number may be system generated. This san number will be cited in SE02.				
Not Used	ST03	1705	<b>Implementation Convention Reference</b>	O AN 1/35			
			Reference assigned to identify Implementation Convention				

Segment:  $\mathbf{AK1}$  Functional Group Response Header

Position: 0200

Loop:

Level:

**Usage:** Mandatory

Max Use: 1

**Purpose:** To start acknowledgment of a functional group

Syntax Notes:

**Semantic Notes:** 

1 AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.

2 AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.

**Comments:** 

**Notes:** 

1. Use to identify the unique identification number of the functional group in which the transaction set(s) being acknowledged was received.

2. Only one functional group may be referenced in a single 997 acknowledgment transaction set.

	Ref.	Data						
	Des.	<b>Element</b>	<u>Name</u>	Att	<u>ributes</u>			
M	AK101	479	<b>Functional Identifier Code</b>	M	ID 2/2			
			Code identifying a group of application related transaction sets					
			Cite, using the appropriate code from the X12 code list, the fur group ID found in GS01 of the functional group being acknown					
			Refer to 004030 Data Element Dictionary for acceptable coo	le va	lues.			
M	AK102	28	<b>Group Control Number</b>	M	N0 1/9			
			Use to identify the number cited in GS06 of the functional group being acknowledged.					

Segment: AK2 Transaction Set Response Header

Position: 0300

Loop: AK2 Optional

Level:

**Purpose:** 

Usage: Optional

Max Use: 1

To start acknowledgment of a single transaction set

Syntax Notes:

**Semantic Notes:** 

- 1 AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.
- **2** AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.

#### **Comments:**

**Notes:** 

- 1. Use to identify the unique identification number of the transaction set being acknowledged.
- 2. AK2 and AK5 shall be provided for each transaction set that is accepted.
- 3. Also, AK2 and AK5 shall be provided for each transaction set being rejected for containing a syntactical error.

	Ref.	Data		
	Des.	<b>Element</b>	<u>Name</u>	<b>Attributes</b>
M	AK201	143	<b>Transaction Set Identifier Code</b>	M ID 3/3
			Code uniquely identifying a Transaction Set	
			Refer to 004030 Data Element Dictionary for acceptable	e code values.
M	AK202	329	<b>Transaction Set Control Number</b>	M AN 4/9
			Identifying control number that must be unique within the functional group assigned by the originator for a transaction.	
			Use to identify the number cited in SE02/ST02 of the being acknowledged.	transaction set

Segment: AK3 Data Segment Note

**Position:** 0400

Loop: AK3 Optional

Level:

Usage: Optional

Max Use: 1

**Purpose:** To report errors in a data segment and identify the location of the data segment

Syntax Notes: Semantic Notes:

**Comments:** 

Notes: This 1/AK3/0400 loop shall be used only to identify one or more segments

containing syntactical errors resulting in rejection of the transaction set or functional group. This loop shall not be used when transaction set and functional group receipt and acceptance is being acknowledged.

#### **Data Element Summary**

	Ref.	Data		
	Des.	<b>Element</b>	<u>Name</u>	<b>Attributes</b>
M	AK301	721	Segment ID Code	M ID 2/3
			Code defining the segment ID of the data segment in error (SA - Number 77)	See Appendix
			Use to identify the segment containing syntactical errors, in the ASC X12 Data Segment Dictionary, e.g., DTM, NI	
M	AK302	719	Segment Position in Transaction Set	M No 1/6
			The numerical count position of this data segment from the transaction set: the transaction set header is count position 1	
		Use to identify the segment's sequential position within the of the transaction set as transmitted. This number is not position number portrayed in the transaction set structure example, if the segments used in an 810 request for progressive as follows: ST, BIG, REF, NI, NI, PER, ITD, DTM, SLN, SLN, TDS, CTT, SE, and there was a syntax second use of the NI segment, the number cited would be syntax error was in the third use of the SLN segment, the would be 13.	the segment's re. For ress payment 1, IT1, IT1, error in the e 5. If the	
	AK303	447	Loop Identifier Code	O AN 1/6
			The loop ID number given on the transaction set diagram is this data element in segments LS and LE	the value for
	AK304	720	Segment Syntax Error Code	O ID 1/3
			Code indicating error found based on the syntax editing of a	segment
			Use only when a segment is being rejected, to identify the rejection. Do not use when the error is in a data element segment and editing is being done at least to that level.	*

Refer to 004030 Data Element Dictionary for acceptable code values.

Segment: AK4 Data Element Note

Position: 0500

Loop: AK3 Optional

Level:

Usage: Optional Max Use: 99

**Purpose:** To report errors in a data element or composite data structure and identify the

location of the data element

**Syntax Notes:** 

**Semantic Notes:** 

In no case shall a value be used for AK404 that would generate a syntax error, e.g., an invalid character.

**Comments:** 

**Notes:** 

Use to identify an error with a data element. When used, there must be a use of the AK3 segment citing the segment in which the data element with the error appears. Use multiple occurrences of this segment to identify all data element errors within the segment specified in the preceding AK3 segment.

	Ref.	Data				
	Des.	<b>Element</b>	<u>Name</u>	<b>Attributes</b>		
$\mathbf{M}$	AK401	C030	Position in Segment	M		
			Code indicating the relative position of the simple data elem- composite data structure in error within a segment, count be 1 for the position immediately following the segment ID; ad- indicating the relative position of a repeating structure in erro- beginning with 1 for the position immediately following the element separator; additionally indicating the relative position component of a composite data structure in error, count beg- for the position following the preceding element or repetition	ginning with ditionally ror, count preceding on of a inning with 1		
M	C03001	722	<b>Element Position in Segment</b>	M N0 1/2		
			This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID			
			Use to indicate the position of the data element, within the containing the error, e.g., 3, 12, etc.	e segmeni,		
	C03002	1528	<b>Component Data Element Position in Composite</b>	O N0 1/2		
			To identify the component data element position within the is in error	composite that		
	C03003	1686	<b>Repeating Data Element Position</b>	O N0 1/4		
			To identify the specific repetition of a data element that is in	ı error		
Must Use	AK402	725	Data Element Reference Number	O N0 1/4		
			Reference number used to locate the data element in the Dat Dictionary	a Element		

			Use to identify the data element number as it appears Data Element Dictionary, for example, the data elem N101 is 98, the data element number for N103 is 66.	lement number for 66. M ID 1/3		
M	AK403	723	Data Element Syntax Error Code	M ID 1/3		
			Code indicating the error found after syntax edits of a data element			
			Refer to 004030 Data Element Dictionary for acceptable code values.			
	AK404	724	Copy of Bad Data Element	O AN 1/99		
			This is a copy of the data element in error			

Segment: AK5 Transaction Set Response Trailer

**Position:** 0600

Loop: AK2 Optional

Level:

**Usage:** Mandatory

Max Use: 1

Purpose: To acknowledge acceptance or rejection and report errors in a transaction set

Syntax Notes: Semantic Notes:

**Comments:** 

Notes: Use to indicate whether the transaction set indicated in the corresponding AK2

segment was accepted or rejected. If the transaction set is being rejected, use this

segment to identify up to five (5) syntax errors at the transaction level.

			Data Element Summary					
	Ref.	Data						
	Des.	<b>Element</b>	<u>Name</u>	Att	<u>ributes</u>			
M	AK501	717	<b>Transaction Set Acknowledgment Code</b>	M	<b>ID</b> 1/1			
			Code indicating accept or reject condition based on the syntax	k edi	iting of			
			the transaction set					
			Refer to 004030 Data Element Dictionary for acceptable code values.					
	AK502	718	Transaction Set Syntax Error Code	O	ID 1/3			
			Code indicating error found based on the syntax editing of a transaction set					
			1. Use only when a transaction set is being rejected, to identify the basis for rejection. If multiple codes apply, they may be carried in AK503 through AK506, as necessary. No individual code may be used more than once in a single use of this segment.					
			2. Use code 5 when the 1/AK3/040 loop is not used and syntactical errors occurred below the transaction set level.					
			Refer to 004030 Data Element Dictionary for acceptable code values.					
	AK503	718	Transaction Set Syntax Error Code	O	ID 1/3			
			Code indicating error found based on the syntax editing of a t	rans	saction set			
			Refer to 004030 Data Element Dictionary for acceptable code	e va	lues.			
	AK504	718	Transaction Set Syntax Error Code	o	ID 1/3			
			Code indicating error found based on the syntax editing of a t	rans	saction set			
			Refer to 004030 Data Element Dictionary for acceptable code	e va	lues.			
	AK505	718	Transaction Set Syntax Error Code	o	ID 1/3			
			Code indicating error found based on the syntax editing of a t	rans	saction set			
			Refer to 004030 Data Element Dictionary for acceptable code values.					
	AK506	718	Transaction Set Syntax Error Code	o	ID 1/3			
			Code indicating error found based on the syntax editing of a t	rans	saction set			
			Refer to 004030 Data Element Dictionary for acceptable code					
			, 1					

Segment:  $\mathbf{AK9}$  Functional Group Response Trailer

**Position:** 0700

Loop:

Level:

**Usage:** Mandatory

Max Use:

**Purpose:** To acknowledge acceptance or rejection of a functional group and report the

number of included transaction sets from the original trailer, the accepted sets, and

the received sets in this functional group

Syntax Notes: Semantic Notes:

**Comments:** 

1 If AK901 contains the value "A" or "E", then the transmitted functional group is

accepted.

Notes: 1. Use only to indicate whether the functional group was accepted or rejected

based on syntax errors in the functional group header or trailer.

2. If a functional group is rejected, all transaction sets within that group must be rejected using the AK9. In this case, individual AK2s for the rejected transaction

sets need not be provided.

3. If the functional group is being rejected, use to identify up to five (5) syntax

errors at the functional group level.

	Ref.	Data			
	Des.	<b>Element</b>	<u>Name</u>	Att	<u>ributes</u>
M	AK901	715	Functional Group Acknowledge Code	M	<b>ID</b> 1/1
			Code indicating accept or reject condition based on the syntathe functional group	ax ed	iting of
			Refer to 004030 Data Element Dictionary for acceptable co	de va	lues.
$\mathbf{M}$	AK902	97	<b>Number of Transaction Sets Included</b>	M	N0 1/6
			Total number of transaction sets included in the functional g interchange (transmission) group terminated by the trailer co data element		
M	AK903	123	<b>Number of Received Transaction Sets</b>	M	N0 1/6
			Number of Transaction Sets received		
M	AK904	2	<b>Number of Accepted Transaction Sets</b>	M	N0 1/6
			Number of accepted Transaction Sets in a Functional Group	)	
	AK905	716	Functional Group Syntax Error Code	O	ID 1/3
			Code indicating error found based on the syntax editing of the group header and/or trailer	ne fu	nctional
			1. Use only when a functional group is being rejected to basis for rejection.	iden	tify the
			2. Codes may also be carried in AK906 through AK909,	but i	10

# individual code may be used more than once in a single iteration of this segment.

Refer to 004030 Data Element Dictionary for acceptable code values.

### AK906 716 Functional Group Syntax Error Code

Code indicating error found based on the syntax editing of the functional group header and/or trailer

O ID 1/3

Refer to 004030 Data Element Dictionary for acceptable code values.

## AK907 716 Functional Group Syntax Error Code O ID 1/3

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 004030 Data Element Dictionary for acceptable code values.

## AK908 716 Functional Group Syntax Error Code O ID 1/3

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 004030 Data Element Dictionary for acceptable code values.

## AK909 716 Functional Group Syntax Error Code O ID 1/3

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 004030 Data Element Dictionary for acceptable code values.

Segment: **SE** Transaction Set Trailer

Position: 0800

Loop:

Level:

Usage: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted

segments (including the beginning (ST) and ending (SE) segments)

**Syntax Notes:** 

**Semantic Notes:** 

**Comments:** 1 SE is the last segment of each transaction set.

M	Ref. Des. SE01	Data <u>Element</u> 96	Name Number of Included Segments		ributes N0 1/10	
			Total number of segments included in a transaction set inclu SE segments	ding	ST and	
M	SE02	329	Transaction Set Control Number	M	AN 4/9	
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set			
			Use the same number cited in ST02.			